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In the Claims

Claims 15-35 are pending in the application.

Please add the following new claims.

22 ~~36~~. A method for increasing the bearing capacity of foundation soils for built structures comprising:

- establishing appropriate treatment levels located at different depths in a foundation soil requiring bearing capacity increasing, said foundation soil being at least that part of soil having to withstand dynamic and static weights exerted by a built structure and by overlying and adjacent soil masses;
- providing a plurality of holes spaced from each other deep in the foundation soil so as to reach said treatment levels;
- providing an expandable substance with very fast expansion time and with a potential increase in volume of the expanded substance being at least five times the volume of the substance before expansion;
- injecting into the soil, through said holes, said substance which expands as a consequence of a chemical reaction;
- producing compaction of the soil contiguous to each substance injection zone by way of the expansion of said substance injected into the foundation soil; and
- estimating the bearing capacity achieved in the foundation soil treated with expanding substance injections by constantly monitoring the level of the soil surface and/or built structure overlying the injection zone to detect a moment when the built structure and/or the soil surface, overlying said injection zone, begins to raise which is the moment when the compaction of the soil due to the substance expansion has reached levels generally higher than a required minimum value at which the soil lying below and around said injection zone withstands and rejects dynamic and static weights exerted thereon by said built structures and by overlying and adjacent soil masses.--

23 ~~37~~. A method for increasing the bearing capacity of foundation soils for built structures comprising:

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- establishing appropriate treatment levels located at different depths in a foundation soil requiring bearing capacity increasing, said foundation soil being at least that part of soil withstanding dynamic and static weights exerted by a built structure and by overlying and adjacent soil masses;
 - providing a plurality of holes spaced from each other deep in the foundation soil so as to reach said treatment levels;
 - providing an expandable substance with very fast expansion time and with a potential increase in volume of the expanded substance being at least five times the volume of the substance before expansion;
 - injecting into the soil, through said holes, a quantity of said substance which expands as a consequence of a chemical reaction;
 - producing compaction of the soil contiguous to the substance injection zone by way of the expansion of said quantity of substance injected into the foundation soil until the soil compaction reaches levels which are generally higher than a minimum compaction value required to provide a bearing capacity of the foundation soil suitable to withstand any dynamic and static weight exerted thereon by the built structures and by overlying and adjacent soil masses; and
 - detecting reaching of said minimum compaction value required by constantly monitoring level variations of the soil surface and/or of the built structure overlying said injection zone to detect a moment when the built structure and/or the soil surface, overlying said injection zone, begins to raise, which is the moment when the soil lying below and around said injection zone withstands and rejects upwardly the dynamic and static weight exerted thereon by said built structures and overlying and adjacent soil masses; and
 - carrying out said expandable substance injection at said treatment levels at least until said minimum compaction value detected through said monitoring is reached.—
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